

# APPENDIX B – GLOSSARY OF TERMS

## A

### **Adverse Effect (to an Historic Property)**

An adverse effect occurs when a federal action alters, directly or indirectly, any of the characteristics of an historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

### **Advisory Council on Historic Preservation**

An independent Federal agency, established under the National Historic Preservation Act of 1966 (NHPA), as amended, to advise the President and Congress on historic preservation matters, to review Federal agency historic preservation programs and policies, to provide and encourage education and training on historic preservation, and to carry out reviews of Federal agency undertakings under Section 106 of the NHPA.

### **Affected Environment**

The baseline environment of the relative resource components.

### **Age Class**

A distinct aggregation of trees originating from a single natural event or regeneration activity, or a group of trees, e.g. 10-year age class, as used in inventory or management.

### **Aggregate surface**

Road surface consisting of crushed or screened graded material, such as limestone or creek gravel.

### **Air Quality Related Values (AQRV's)**

A feature or property of an area that is (or has the potential to be) affected in some way by air pollution. General categories are: flora, fauna, soil, water cultural/historical resources, odor and visibility.

### **Ambient Air**

The air of the surrounding outdoor environment. The air encompassing a specific geographic area.

### **Analysis Area**

The geographical boundary of the area to be analyzed.

### **Animal-unit (AU)**

Defines forage consumption on the basis of one standard mature 1,000-pound cow, either dry or with calf up to 6 months old; all other classes and kinds of animals can be related to this standard, e.g. a bull equals 1.25 AU, a yearling steer equals 0.6 AU.

### **Animal-unit-month (AUM)**

The amount (780 pounds) of air-dry forage calculated to meet one animal unit's requirement for one animal unit for one month.

### **Annual (plant)**

A plant species living and growing for only one year or season

### **Aquifer**

An underground geological formation or group of formations that contain water, a source of ground water for wells and springs

**Aquitard**

A layer of low permeability that can store ground water and also transit it slowly from one aquifer to another.

**Archaeological Resources Protection Act (ARPA)**

Public Law 96-95, 16 USC 470a, passed in 1979, required a permit for any excavation or removal of archaeological resources from public or Indian lands. Excavations must be undertaken for the purpose of furthering archaeological knowledge in the public interest, and resources removed remain the property of the United States.

**Area of Potential Effect**

The geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.

**Arterial roads**

Roads that provide service to large land areas and usually connect with public highways or other forest arterial roads to form an integrated network of primary travel routes. Their location and standard are often determined by a demand for maximum mobility and travel efficiency rather than specific resource management service. They are usually developed and operated for long-term land and resource management purposes and constant service.

**Attainment Area**

A geographic area in which levels of a criteria air pollutant meet the health-based primary standard (national ambient air quality standard, or NAAQS) for the pollutant. An area may have on acceptable level for one criteria air pollutant, but may have unacceptable levels for others. Thus, an area could be both attainment and non-attainment at the same time. Attainment areas are defined using federal pollutant limits set by EPA. There are six Criteria Pollutants; Lead (Pb), Sulfur Dioxide (SO<sub>x</sub>), Nitrogen Oxides (NO<sub>x</sub>), Ozone (O<sub>3</sub>), Particulate Matter (PM-10 and PM-2.5) and Carbon Monoxide (CO) which are regulated by EPA. A seventh pollutant, Volatile Organic Carbons (VOC's) is on the list but is not regulated by EPA at this time.

**Available water holding capacity**

The maximum amount of water a soil profile can hold, which can be used by plants.

**B****Basal area**

The area (in square feet) of the cross section of a tree stem, including the bark, generally at breast height (4.5 feet above the ground). In the aggregate, it is the total cross-sectional area of all trees on a per acre basis, and provides a measurement of how much of a site is occupied by trees, e.g. 80 sq. ft. /acre.

**Biennial (plant)**

A plant species that completes its life cycle, from seed germination to seed production, in two years. Also means, "to occur every two years," as in biennial burns.

**Biodiversity**

The diversity of life in an area, including the diversity of genes, species, plant and animal communities, ecosystems, and the interaction of these elements.

**Biological Opinion (BO)**

An official report by the USDI Fish and Wildlife Service or the National Marine Fisheries Service issued in response to a formal Forest Service request for consultation or conference. It states whether an action is likely to result in jeopardy to a species or adverse modification of its critical habitat.

**Biomass**

The total amount (weight) of living material in a given habitat.

**Board foot**

An amount of wood equivalent to a piece measuring 12" by 12" by 1".

**Browse**

That part of leaf and twig growth of shrubs, woody vines and trees on which browsing animals, such as deer can feed; to consume browse.

**Buffer strip**

A strip of vegetation that is left unmanaged or is managed to reduce the impact that a treatment or action on one area would have on an adjacent area.

**Bunch grass**

Grasses of many genera which grow primarily in tufts or clumps rather than forming a sod or mat. Native warm season grasses are often referred to as "bunch grasses".

## C

**Canopy**

The maximum amount of water a soil profile can hold, which can be used by plants.

**Carbon sequestration**

Carbon sequestration in terrestrial ecosystems can be defined as the net removal of CO<sub>2</sub> from the atmosphere into long-lived pools of carbon. The pools can be living, aboveground plants, products with a long, useful life created from plants such as lumber, living biomass in soils such as plant roots or micro-organisms or other carbon compounds in soils and deeper environments. Increasing photosynthetic carbon fixation alone is not enough. This carbon must be fixed into long-lived pools such as trees or lumber. Otherwise, one may be simply altering the size of changes in the carbon cycle, not increasing carbon sequestration. (Department of Energy)

**Carrying capacity**

The average number of livestock and wildlife that may be sustained on a management unit compatibly with management objectives. It is a function of site characteristics, and management goals and intensity.

**Class I Area**

A geographic area designated for the most stringent degree of protection from future degradation of air quality. The Clean Air Act designates as mandatory Class I areas each National Park over 6,000 acres and each Wilderness over 5,000 acres in existence as of August 7, 1977. Subsequent additions of land to those Class I areas are also considered Class I.

**Class II Area**

A geographic area designated for a moderate degree of protection from future degradation of air quality. Moderate increases in new pollution may be permitted in Class II areas. All Wildernesses designated after August 7, 1977 or were less than 5,000 acres are automatically Class II areas, as are all other National Forest System lands.

**Classified Roads**

Roads wholly or partially within or adjacent to National Forest System lands that are determined to be needed for long-term motor vehicle access, including State roads, county roads, privately owned roads, National Forest System roads, and other roads authorized by the Forest Service.

**Class of animal**

Description of age and sex group for a particular kind of animal, e.g., cow, calf, yearling heifer, ewe, fawn.

**Complete Salvage**

A method of regenerating an even-aged stand in which a new age class develops in a fully exposed microclimate after removal, in a single cutting, of all trees in a previous stand. Regeneration is from natural seeding, direct

seeding, planted seedlings, and/or advanced reproduction. Complete salvage may be done in groups or patches or in strips. In the complete salvage system, the management unit or stand in which regeneration, growth, and yield are regulated consists of the individual salvage stand (see group selection). When the primary source of reproduction, the preferred term is “over-story removal”.

**Complete Salvage with reserves**

A salvage method in which varying numbers of reserve trees are not harvested to attain goals other than regeneration.

**Code of Federal Regulations (CFRs)**

A codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the Federal Government. The Code is divided into 50 titles that represent broad areas subject to Federal regulations. Each title is divided into chapters, which usually bear the name of the issuing agency. Each chapter is further subdivided into parts covering specific regulatory areas.

**Collector road**

Serves smaller land areas than a Forest arterial road and is usually connected to a Forest arterial road or public highway. Collects traffic from Forest local roads and/or terminal facilities. The location and standard are influenced by long-term multi-resource service needs as well as travel efficiency. May be operated by either constant or intermediate service, depending on land use and resource management objectives for the area served by the facility.

**Compaction**

In soil, the process by which soil particles are rearranged to decrease void space and bring them in closer contact with each other, thereby reducing available water capacity, aeration, and porosity and increasing bulk density.

**Cool-season plant**

A plant that generally makes the major portion of its growth during the late fall, winter, and spring.

**Confining unit**

Relatively impervious layers of rock that separate one aquifer from other aquifers.

**Connected actions**

Management practices or actions which 1) automatically trigger other actions that may require environmental impact statements; 2) cannot or will not proceed unless other actions are taken previously or simultaneously; or 3) are interdependent parts of a larger action and depend on the larger action for their justification.

**Cover crop**

A short-lived, usually annual, plant used to quickly provide vegetation on disturbed soil until native vegetation can grow back on the site. The root systems of cover crops develop quickly to help hold soil and prevent or minimize erosion from a site where soil has been exposed.

**Criteria air pollutants**

A group of very common air pollutants regulated by EPA on the basis of criteria (information on health and/or environmental effects of pollution). Criteria air pollutants are widely distributed all over the country.

**Crown closure**

The ground area covered by the crowns of trees or woody vegetation as delimited by the vertical projection of crown perimeters and commonly expressed as a percent of the total ground area (Syn. “canopy cover” or “crown cover”).

**Crown density**

The amount and compactness of foliage of the crowns of trees and/or shrubs.

**Cumulative Impacts**

The impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably-foreseeable future actions regardless of what agency (Federal or non-Federal) or person

undertakes such actions. Cumulative impacts can result from usually minor but collectively significant action taking place over a period of time (40 CFR 1508.7).

## **D**

### **Deciduous**

Pertaining to any plant organ or group of organs that is shed naturally; perennial plants that are leafless for some time during the year.

### **Decommission**

To remove from service a road or trail that is no longer needed.

### **Decomposition**

Break up into constituent elements through chemical change.

### **Deferment**

Delay of livestock grazing on an area for an adequate period of time to provide for plant reproduction, establishment of new plants, or restoration of vigor.

### **Deferred-rotation**

A grazing system that provides for a systematic rotation of the deferment among pastures.

### **Dendritic Drainage Pattern**

An arrangement of surface drainage in which the streams branch randomly at almost any angle.

### **Desired plant community (DPC)**

A plant community that produces the kind, proportion, and amount of vegetation necessary for meeting or exceeding the management objectives for an ecological site.

### **Diameter at Breast Height (DBH)**

The diameter of a tree, generally measured at 4.5 feet from the ground.

### **Dispersed Recreation**

Lands and waters under Forest Service jurisdiction that are not developed for intensive recreation use. Dispersed areas include general undeveloped areas, roads, trails, and water areas not treated as developed sites.

### **Displacement**

In soils, often used interchangeably with erosion. Detachment and movement of soil particles by water, wind, ice, or gravity and can be natural, human caused or both.

### **Diversity**

The distribution and abundance of different plant and animal species within the area covered by a land and resource management plan.

### **Dolomite**

Magnesium-rich sedimentary rock resembling limestone

### **Down woody debris**

Woody portions of trees that have fallen to and are lying on the ground. Down woody debris include twigs, branches, logs, stumps, and whole trees that have fallen down.

**Duff**

The lower portion of the organic layer covering the soil, consisting of decomposed litter. The more or less firm organic layer on top of mineral soil, consisting of fallen vegetative matter in the process of decomposition, including everything from pure humus below to the litter on the surface.

**E****Early successional wildlife species**

Animals that use young forests or new habitats. Succession is the sequence of ecological stages beginning with grass/shrub/seedling communities and progressing to a climax forest. Early successional refers to the beginning stages such as the grass/shrub/seedling stage.

**Ecological Land Type (ELT)**

An area of land with a distinct combination of natural, physical, chemical and biological properties that cause it to respond in a predictable and relatively uniform manner to the application of given management practices. In a relatively undisturbed state and/or at a given stage (sere) of plant succession, and ELT is usually occupied by a predictable and relatively uniform plant community. Typical size generally ranges from about 10 to a few hundred acres.

**Ecological site**

Land with a specific potential natural community and specific physical site characteristics, differing from other kinds of land in its ability to produce vegetation and to respond to management. Synonymous with range site.

**Ecosystem**

Organisms that together with their physical environment form an interacting system and inhabit an identifiable space.

**Ectomycorrhizal**

symbiotic association between the stringlike mass of fungi and the roots of certain plants. This stringlike mass (called mycorrhiza) forms a mantle on the surface of the roots and extends into the surrounding soil and inward between the root cells. This association enables the roots to take up nutrients and moisture into the plant which might otherwise be unavailable to it.

**Edge**

The more or less well-defined boundary between two or more elements of the environment; for example, field/woodland.

**Effect (of an action on Historic Properties)**

Alteration to the characteristics of an historic property qualifying it for inclusion in, or eligibility for, the National Register.

**Endangered species**

Any species that is in danger of extinction throughout all or a significant part of its range. Endangered species must be designated in the Federal Register. (See "threatened species")

**Endemic**

Native or confined to a certain region; having comparatively restricted distribution.

**Environmental Analysis**

An analysis of alternative actions and their predictable short- and long-term environmental consequences.

**Environmental Assessment (EA)**

A concise public document that briefly provides sufficient evidence and analysis for determining whether to prepare an Environmental Impact Statement or to return a finding of no significant impact, aids an agency's

compliance with NEPA when no Environmental Impact Statement is necessary, or facilitates preparation of a statement when one is necessary.

**Environmental Consequences**

The physical, biological, social and economic results (good or bad) of implementing a given alternative.

**Ephemeral stream**

A stream that flows less than 10 percent of the time, only in direct response to rainfall, with a channel that may be scoured or unscoured and is always above the water table.

**Erosion**

The wearing away of the land surface by running water, wind, ice and other geological agents. The detachment and removal of soil from the land surface by wind, water or gravity.

**Even-aged stand**

A stand of trees containing a single age class in which the range of tree ages is usually less than 10 percent of the rotation.

**Even-aged silvicultural system**

The application of a combination of actions that result in the creation of stands in which trees of essentially the same age grow together. Managed even-aged forests are characterized by a distribution of stands of varying ages (and, therefore, tree sizes) throughout the forest area. The difference in age between trees forming the main canopy level of a stand usually does not exceed 20 percent of the age of the stand at harvest rotation age. Regeneration in a particular stand is obtained during a short period at or near the time that a stand has reached the desired age or size for regeneration and is harvested. Clear-cut, shelterwood, or seed tree cutting methods produce even-aged stands.

**Existing visual conditions (EVC)**

The present state of visual alteration that is measured in six degrees (untouched, unnoticed, minor disturbance, disturbed, major disturbance, drastic disturbance) of deviation from the natural landscape.

**F****Fauna**

The animals of a given region or period.

**Filter strip**

A designated area bordering streams and riparian areas where soil compaction by machinery is avoided and soil disturbance is minimized so that the sediment filtering ability of the forest floor is maintained.

**Floodplain**

Low land and relatively flat areas joining inland and coastal waters, including debris cones and flood prone areas of offshore islands. The minimum area included is that subject to a one percent (100-year recurrence) or greater chance of flooding in any given year.

**Flora**

The plants of a given region or period.

**Forage**

Browse and herbage that are available for food for grazing animals or be harvested for feeding. Forage production. The weight of forage that is produced within a designated period of time on a given area (e.g. pounds per acre).

**Forb**

A non-woody, broad-leafed plant.

**Forest land**

Land at least 10 percent occupied by forest trees of any size or formerly having had such tree cover and not currently developed for non-forest use.

**Forest Service Policy**

Policy set by Forest Service Manuals and specific National Forest Land and Resource Management Plans.

**Forest type**

A descriptive term used to group stands of similar character, species composition, and other ecological factors.

**Forest-wide Standards and Guidelines**

A set of statements which define or indicate acceptable norms, specifications or quality that must be met when accomplishing an activity or practice under a given set of conditions on the Mark Twain National Forest.

**Fragipan**

Loamy, brittle subsurface horizon low in porosity and content of organic matter and low or moderate in clay but high in siliceous sand. A fragipan appears cemented and restricts roots. When dry, it is very hard and has a higher bulk density than the horizons above. When wet, it tends to rupture suddenly under pressure rather than to deform slowly.

**Frequency**

In reference to the Grazing Response Index, the number of times plants are defoliated during the growing season.

## **G**

**Game species**

Wild animals hunted for food or sport.

**Goal**

A concise statement that describes a desired condition to be achieved sometime in the future. It is generally expressed in broad, general terms and usually does not have a specific date for completion.

**Goods and Services**

The various outputs, including on-site uses, produced from forest and rangeland resources.

**Grass**

A plant with long, narrow leaves having parallel veins and nondescript flowers. Stems are hollow or pithy in cross-section.

**Grass-like plant**

A plant that resembles a grass but has stems that are solid in cross-section, including rushes and sedges.

**Grazing management**

The control of grazing and browsing animals to accomplish a desired result.

**Grazing preference**

(1) Selection of plants, or plant parts, over others by grazing animals. (2) In the administration of public lands, a basis upon which grazing-use permits and licenses are issued.

**Grazing pressure**

An animal-to-forage relationship measured in terms of animal units per unit weight of forage at any instant.



**Grazing Response Index (GRI)**

A technique used to assess effects of the current years grazing and plan for the next year. It considers grazing frequency and intensity, and the plants' opportunity to grow or regrow before, between or after grazing periods.

**Grazing system**

Grazing management that defines the periods of grazing and non-grazing.

**Ground water**

Water residing in the interstices of soil and rock below the surface.

**Group selection**

A method of regenerating uneven-aged stands in which trees are removed, and new age classes are established, in small groups. The maximum width of groups is approximately twice the height of mature trees, with small openings providing microenvironments suitable for shade-tolerant regeneration and the larger openings providing conditions suitable for regeneration that is more shade-intolerant. As applied in the Carman Springs project, groups may range in size from approximately ¼ to 2 acres. In the group selection system, the management unit or stand in which regeneration, growth, and yield are regulated consists of a landscape containing an aggregation of groups (see clearcutting).

**Guideline**

An indication or outline of policy or conduct.

## H

**Habitat**

The natural environment of a plant or animal. An animal's habitat includes the total environmental conditions for food, cover and water within its home range.

**Habitat type**

The collective area that one plant community occupies or will come to occupy as succession advances to climax.

**Habitat capability**

The ability of the vegetative community to provide food, cover, and water for wildlife.

**Hardwood**

A broad-leaved flowering tree, as distinguished from a conifer. Trees belonging to the botanical groups of *angiospermae*.

**Harvest method**

A cutting method by which a stand is logged. Emphasis on meeting logging requirements while concurrently attaining silvicultural objectives.

**Herbaceous**

A plant that does not develop persistent woody tissue above the ground (annual, biennial, or perennial), but whose aerial portion naturally dies back to the ground at the end of a growing season. Herbaceous plants include such categories as grasses, grass-like (sedges, rushes) and forbs.

**Herbivore**

An animal that exclusively eats plants.

**High-risk trees**

Trees with a high probability of dying in the immediate future.

# I

## **Improvement cutting**

A cutting made in a stand, pole-sized or larger, primarily to improve composition or quality by removing less-desirable trees of any species. As applied to the Carman Springs project, this is an intermediate harvest to promote or enhance uneven-age structure in a stand.

## **Increaser**

A plant species of the original or climax plant community that increases in relative amount, at least for a time, under current grazing management.

## **Indicator species**

Species that indicate the presence of certain environmental conditions, seral stages, or previous treatment.

## **Intensity**

In reference to the Grazing Response Index, the proportion of leaves removed during a grazing period.

## **Infiltration**

The downward entry of water into the soil.

## **Interdisciplinary (ID) Team**

A group of two or more individuals with different training assembled to solve a problem or perform a task. The team is assembled out of recognition that no one scientific discipline is sufficiently broad enough to solve the problem. The members of the team proceed to solution with frequent interaction so that each discipline may provide insights to any stage of the problem and disciplines may combine to provide new solutions.

## **Intermediate treatments**

A collective term for any treatment designed to enhance growth, quality, vigor, and composition of the stand after establishment or regeneration and prior to final harvest.

## **Intermittent stream**

A stream that flows seasonally (10-90 percent of the time) in response to a fluctuating water table, with a scoured channel that is at least three feet wide.

## **Interpretive sites**

A developed site at which a broad range of natural or cultural history is interpreted or described for the enjoyment of the public.

## **Intolerant species**

Those plant species that do not grow well in shade (syn. Shade-intolerant species).

## **Introduced species**

A species not a part of the original fauna or flora of a given area.

## **Invader**

Plant species that were absent in undisturbed portions of the original vegetation of a specific range site and will invade or increase following disturbance or continued heavy grazing.

## **Invasive species**

Species that are aggressive and tend to out-compete species native to an area or region. Normally, invasive species are also non-native or exotic, but can be native species that are off-site.

**Issue**

A subject or question of widespread interest identified through public participation and which relates to the management of National Forest System lands. A matter of controversy or dispute over resource management activities or land use that is well defined and/or topically discrete. Usually the causal relationship between the activity or use and the undesirable results are well defined or able to be documented. Statement of the planning issues orients the management planning process.

**K****Karst**

Terrain with distinctive characteristics of relief and drainage arising primarily from a higher degree of rock solubility in natural waters than is found elsewhere. Some of these characteristics are dry streams, underground drainage, caves, and sinks.

**Key area**

A relatively small portion of a management unit selected because of its location, use, or grazing value as a monitoring point for grazing use. It is assumed key areas will reflect the overall acceptability of current grazing management over the whole unit.

**Key species**

Forage species of sufficient abundance, palatability, and sensitivity to management to use as indicators of use of associated species.

**Kind of animal**

An animal species or species group such as sheep, cattle, goats, deer, horses, elk, antelope.

**KV Funds**

Funds collected for reforestation and timber stand improvement work, or other needed resource work, on areas harvested with a timber sale (authorized by the Knutson-Vandenberg Act, passed by Congress in 1930).

**L****Land use**

The occupation or reservation of land or water area for any human activity or any defined purpose.

**Landscape**

A viewed area of land generally of large size and commonly a mosaic of landforms and plant communities irrespective of ownership or other artificial boundaries.

**Late-successional forest**

A forest which has developed over a long period of time with relatively minor disturbances which have not significantly interfered with the successional process, and which is composed of relatively shade-tolerant vegetation.

**Life-form**

Characteristic form or appearance of a species at maturity, e.g., tree, shrub, herb.

**Litter**

The upper portion of the organic layer covering the soil, consisting of unaltered dead remains of plants and animals whose original form is still visible.

**Loess**

Material transported and deposited by wind and consisting of predominantly silt sized particles.

**Long-term sustained yield timber capacity**

The highest uniform wood yield from lands being managed for timber production that may be sustained under specified management intensity consistent with multiple-use objectives.

**M****MBF (thousand board feet)**

One thousand board feet of timber.

**MMBF (million board feet)**

One million board feet of timber.

**Management Area (MA)**

A land area that has common management direction to achieve a common goal. The entire Mark Twain National Forest is divided into management areas.

**Management Direction**

A statement of multiple-use and other goals and objectives, the management prescriptions, associated standards and guidelines, and action plans for attaining them.

**Management intensity**

The management practice or combination of management practices and their associated costs designed to obtain different levels of goods and services.

**Mark Twain Ecological Land Classification Terrestrial System (MT ELCTS)**

Resource inventory system describing land units by which resource managers can assess capability, suitability, and management opportunities for various Forest areas. It serves as a useful reference for land management planning and project implementation

**Mature tree**

A tree where growth has reached the culmination of mean annual increment (economic maturity) and/or one where growth equals loss of biomass, beyond which decline and eventually mortality will occur (biological maturity)

**Mitigation measure**

An action taken to lessen adverse impacts or enhance beneficial effects.

**Monitoring**

The orderly collection, analysis, and interpretation of resource data over time to evaluate progress toward meeting management objectives.

**Multiple-use**

Use of range for more than one purpose, i.e., livestock grazing, recreation, wildlife production, watershed and timber production.

**N****National Ambient Air Quality Standards (NAAQS)**

Legal limits of atmospheric pollution established by the Environmental Protection Agency (EPA), as the concentration limits needed to protect all of the public against adverse effects on public health and welfare, with

an adequate safety margin. Primary standards are those related to health effects; secondary standards are designed to protect the public welfare from effects such as visibility reduction, soiling, material damage and nuisances. There are six criteria pollutants; Lead (Pb), Sulfur Dioxide (SO<sub>x</sub>), Nitrogen Oxides (NO<sub>x</sub>), Ozone (O<sub>3</sub>), Particulate Matter (PM-10 and PM-2.5) and Carbon Monoxide (CO). A seventh pollutant, Volatile Organic Carbons (VOC's) is on the list but is not regulated by the EPA at this time.

### **National Environmental Policy Act (NEPA)**

Establishes a national policy to encourage productive and enjoyable harmony between humankind and the environment, to promote efforts that will prevent or eliminate damage to the environment and stimulate the health and welfare of humans, to enrich the understanding of ecological systems and natural resources important to the nation, and to establish a Council on Environmental Quality.

### **National Forest System Road**

A road under the jurisdiction of the Forest Service and determined to be needed for long-term motor vehicle access. (Also referred to as a system road)

### **National Historic Preservation Act of 1966, as amended (NHPA)**

16 U.S.C. 470-470w-6. An act, passed in 1966 and most recently amended in 2000 that establishes the Federal Government's policy on historic preservation and the national historic preservation program, through which the policy is implemented. Section 106 of the act requires federal agencies to consider the effects of their actions on historic properties and to seek comments from independent reviewing agencies, the Advisory Council on Historic Preservation and the State Historic Preservation Officer.

### **National Register Criteria**

The criteria established by the Secretary of the Interior for use in evaluating the significance and eligibility of districts, sites, buildings, structures and objects for the National Register. These criteria, also termed "significance criteria", are found listed in 36 CFR Part 60.

### **National Register Eligible Property**

Includes both properties formally determined to meet the significance criteria in accordance with regulations of the Secretary of Interior and all other properties that meet National Register criteria.

### **National Register of Historic Places**

Register maintained by the Secretary of the Interior containing a record of districts, sites, buildings, structures, and objects that meet established National Register significance criteria as found in 36 CFR Part 60.

### **Native species**

A species that is a part of the original fauna or flora of a given area.

### **Natural regeneration**

An age class created from natural seeding, sprouting, suckering, or layering.

### **Non-attainment Area**

A geographic area in which the level of a criteria air pollutant is higher than the level allowed by the federal standards. A single geographic area may have acceptable levels of one criteria air pollutant but unacceptable levels of one or more other criteria air pollutants; thus, an area can be both attainment and non-attainment at the same time. It has been estimated that 60% of Americans live in non-attainment areas. The six Criteria Pollutants are; Lead (Pb), Sulfur Dioxide (SO<sub>x</sub>), Nitrogen Oxides (NO<sub>x</sub>), Ozone (O<sub>3</sub>), Particulate Matter (PM-10 and PM-2.5) and Carbon Monoxide (CO). A seventh pollutant, Volatile Organic Carbons (VOC's) is on the list but is not regulated by EPA at this time.

### **Non-system Road**

A road on National Forest System lands that is not managed as part of the Forest transportation system, such as unplanned roads, abandoned travel ways, and off-road vehicle tracks that have not been designated and managed as a trail, and those roads that were once under permit or authorization and were not decommissioned upon the termination of the authorization.

## O

### **Objective**

A clear and specific statement of planned results to be achieved within a stated time. The results indicated are those that are designed to achieve the desired condition represented by the goal. An objective is measurable and implies precise time-phase steps to be taken and resources to be used which, together, represent the basis for defining and controlling the work to be done.

### **Old growth**

Forest ecosystems distinguished by old trees and related structural features characteristic of later stages of stand and successional development. Some have large trees, snags, large down woody material, multiple tree canopy layers, associated herb and shrub components and canopy gaps. Some of these attributes may also be found in stands in earlier stages of development or in managed stands.

### **Opportunity**

In reference to the Grazing Response Index, the time and actual growth plants make before, between or after grazing periods.

### **Organic material**

An accumulation of decayed and re-synthesized plant and animal residues with a high capacity for holding water and nutrients.

### **Overgrazing**

Continued heavy grazing that exceeds the recovery capacity of individual plants in the community and creates a deteriorated range.

### **Overstocking**

Placing a number of animals on a given area that exceeds the forage supply during the time they are present.

### **Over-story**

Relative to even-aged stands; the mature trees that overtop the younger trees.

### **Over-story removal**

The cutting of trees comprising an upper canopy layer in order to release trees or other vegetation in an under-story (see complete salvage).

### **Overuse**

Using an excessive amount of the current years growth.

## P

### **Palatability**

The relish with which a particular species or plant part is consumed by an animal.

### **Pasture**

A grazing area enclosed and separated from other areas by fencing or other barriers.

### **Percent stocking**

The number of trees in a stand as compared to the desirable number for best growth and management, expressed as a percent.

**Percolation**

The flow of a liquid through a porous substance.

**Perennial**

A plant species having a life span of more than two years.

**Perennial stream**

A stream that flows year-round (more than 90 percent of the time) with a scoured channel that is always below the water line.

**Phenology**

The study of periodic biological phenomena that are recurrent such as flowering or seeding, especially as related to climate.

**Photopoint**

A point from which photos are periodically taken to monitor long-term management responses.

**Plant community**

An assemblage of plants occurring together at any point in time, denoting no particular ecological status.

**Plant succession**

The process of vegetational development whereby an area over time is occupied by different plant communities of later ecological stage.

**Plant vigor**

Plant health; relates to the relative robustness of a plant in comparison to other individuals of the same species.

**PM-10**

Particles with an aerodynamic diameter smaller than ten micrometers. Particles this size and smaller have been shown to cause problems with human health and visibility.

**PM-2.5**

Particles with an aerodynamic diameter of 2.5 micrometers. Particles this size and smaller have been shown to cause problems with human health and visibility.

**Pole**

A tree between the size of a sapling and a mature tree. As applied to the Carman Springs project, a pole is a tree with a dbh greater than 5" and less than 9".

**Potential natural vegetation (PNV)**

The plant community that would develop on an ecological site if all successional sequences were completed without interference by humans under the present environmental conditions; may include naturalized non-native species.

**Puddling**

Act of destroying soil structure, reducing porosity and permeability. Often results from handling soil when it is in a wet, p condition so that when it dries it becomes hard and cloddy.

# R

## **Range (Rangeland)**

Any land supporting grazable or browsable vegetation and managed as a natural ecosystem; can include grasslands, forestlands, shrublands, and pasture. “Range” is not a land use.

## **Range condition**

The “health” of range as compared to some standard at a point in time. The standard can be defined in ecological terms or in terms of a particular use. In the ecological determination, the degree of departure from climax determines condition.

## **Range improvement**

Any practice designed to improve range condition or allow more efficient use.

## **Range management**

A distinct discipline founded on ecological principles with the objective of sustainable use of rangelands and related resources for various purposes.

## **Range Management Unit (RMU) (Allotment)**

Any management area with range management objectives such as grazing allotments.

## **Range readiness**

The defined stage of plant growth at which grazing may begin under a specific management plan.

## **Range site**

Subdivisions of rangeland for management purposes having similar soils, climate and climax plant communities. Two or more identical range sites that are spatially separated should respond in a similar manner to the same kind of management.

## **Raptors**

Birds of prey such as owls, hawks, and eagles.

## **Reasonable and Prudent Measures**

Mandatory actions that must be taken by a Federal agency to minimize the impact of incidental take as exempted by the U.S. Fish and Wildlife Service in a Biological Opinion.

## **Recharge area**

The land area that contributes water to an underground karst feature, such as a cave or spring.

## **Recreation Opportunity Spectrum (ROS)**

A system of classifying the range of recreational experiences, opportunities, and settings available on a given area of land. The six classifications are:

**Primitive (P)** – an unmodified environment, where trails may be present but structures are rare, and where probability of isolation from the sights and sounds of humans is extremely high.

**Semi-primitive non-motorized (SPNM)** – characterized by a predominantly natural appearing landscape where isolation from the sights and sounds of humans is expected. Experiences are more solitary in nature in an environment that offers challenge and risk. Motorized use is not permitted.

**Semi-primitive motorized (SPM)** - characterized by a predominantly natural appearing landscape where isolation from the sights and sounds of humans is expected. Experiences are more solitary in nature in an environment that offers challenge and risk. Motorized use is permitted.



**Roaded Natural (RN)** – characterized by a mosaic of different age classes appearing as a predominantly natural environment. There are few opportunities for challenge and risk and evidence of other users is prevalent. Motorized and non-motorized recreational opportunities are appropriate.

**Rural (R)** – area characterized by a substantially modified natural environment. Challenge and risk opportunities are not important and other users are readily evident. Motorized and non-motorized recreational opportunities are appropriate.

**Urban** – areas characterized by high social interaction and significant modification of the natural environment, such as city parks.

### **Recreation Visitor Day (RVD)**

Recreational use of National Forest System land, which aggregates 12 hours. It may consist of one person for 12 hours, two people for 6 hours, or any combination.

### **Reforestation**

The natural or artificial restocking of an area with trees.

### **Regeneration**

Seedlings or saplings existing in a stand; or the act of establishing young trees naturally or artificially.

### **Regeneration cut**

A cutting method by which a new age class is created. The major methods are clearcutting, seed tree, shelterwood, selection, and coppice.

### **Regional Haze Rule**

On April 22, 1999, Vice President Gore along with the U.S. Environmental Protection Agency announced a major effort to improve air quality in national parks and wilderness areas. The Regional Haze Rule (590k PDF) calls for state and federal agencies to work together to improve visibility in 156 national parks and wilderness areas such as the Grand Canyon, Yosemite, the Great Smokies and Shenandoah. The rule requires the states, in coordination with the Environmental Protection Agency, the National Park Service, U.S. Fish and Wildlife Service, the U.S. Forest Service, and other interested parties, to develop and implement air quality protection plans to reduce the pollution that causes visibility impairment. The first State plans for regional haze are due in the 2003-2008 timeframe. Five multi-state regional planning organizations or RPO's are working together now to develop the technical basis for these plans.

### **Relative stand density**

A measurement of how fully a site is occupied with trees in mixed species stands, which allows for variable tree sizes and species composition.

### **Release**

A treatment designed to free young trees from undesirable, usually overtopping, competing vegetation.

### **Removal cut (shelterwood cut)**

The last timber cut in a shelterwood regeneration, which removes the trees that have provided seed and shade for the new stand.

### **Reserve trees**

Trees, pole-sized or larger, retained in either a dispersed or aggregated manner after a harvest (usually regeneration cut) has been completed.

### **Retention**

See "Visual quality objective"

### **Riparian areas**

Geographically delineated areas with distinctive resource values and characteristics that are comprised of the aquatic and riparian ecosystems, flood plains, and wetlands. They include all areas within a horizontal distance of 100 feet from the edge of perennial streams or other water bodies.

### **Riparian ecosystem**

A transition between the aquatic ecosystem and the adjacent terrestrial ecosystem, which is identified by soil characteristics and distinctive vegetation communities that require free or unbound water.

### **Road Closure**

Activities that restrict or limit access of motorized vehicles. The road is needed for long-term access, but the amount and timing of vehicle traffic is controlled. A common method used to close a road is a gate.

### **Road Construction**

Activity that results in the creation of a new road where one did not exist before. The road's right-of-way would be cleared of impeding vegetation, drainage features would be installed or created, surface material would be added, and any needed signs would be installed.

### **Road Decommissioning**

Activities that eliminate motorized vehicular travel and which help to return the roadway back to a natural state. Road decommissioning may involve one or more of the following treatments: blocking access with earthen berms, rock berms, boulders, or slash piles; restoration of natural drainage features by removing culverts and recontouring the area; scarification to remove the road bed; revegetation by seeding, planting, or fertilizing; and signing to discourage motorized use of the road.

### **Road Maintenance**

The ongoing upkeep of a road necessary to retain or restore the road to the approved road management objective. Activities associated with road maintenance may include surface blading, replacement of surface material, mowing and limbing of roadside vegetation, cleaning and restoring drainage features, and replacing signs.

### **Road Maintenance Level**

All National Forest System roads are assigned a maintenance level. Maintenance level defines the service provided and the maintenance required for the specific road. Factors used to determine a road's maintenance level include, but are not limited to, resource management needs, service life, user safety, volume and type of traffic, surface type, and user comfort and convenience. The following is a very brief description of the road maintenance levels:

1. Maintenance level 1 – Basic custodial care
2. Maintenance level 2 – High clearance vehicles
3. Maintenance level 3 – Suitable for passenger cars
4. Maintenance level 4 – Moderate degree of user comfort
5. Maintenance level 5 – High degree of user comfort

### **Road Reconstruction**

Activity that results in the improvement or realignment of an existing road. Road improvement may increase a road's capacity for traffic or change its original design function. An example of road improvement would be changing the road's surface from aggregate to asphalt. Road realignment results in a new location of a road or a portion of the road and the treatment of the old roadway.

### **Rotation (roads)**

Defined as an investment in construction activity to rebuild a road to its traffic service level, or to that which it was originally constructed.

### **Rotation (timber)**

The number of years required to establish and grow a timber crop to a specified condition of maturity. The rotation includes a period for harvesting and stand re-establishment (usually five years).

**Runoff**

That part of precipitation, as well as any other flow contributions, that appear in surface streams, either perennially or intermittently.

**Rutting**

Soil disturbance where the soil is puddled and the topsoil and/or a portion of the subsoil removed.

**S****Sapling**

As used in timber survey, trees 1.0 to 4.9 inches at DBH.

**Saw timber**

As used in timber survey, trees larger than 9 inches at DBH.

**Scoping**

The process by which significant issues relating to a proposal are identified for environmental analysis. Scoping is an integral part of environmental analysis. Scoping includes eliciting public comments on the proposal, evaluating concerns and developing alternatives for consideration. Depending on the complexity and nature of the action, scoping varies from a brief consideration of a few pertinent factors in a proposed action that may be categorically excluded to full compliance with the Council of Environmental Quality direction for a proposed action that must be documented in an environmental impact statement.

**Section 106 Consultation**

Consultation carried out by the Federal agency with the State Historic Preservation Officer and/or with the Advisory Council on Historic Preservation pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended, and its accompanying regulations found in 36 CFR part 800. The consultation concerns the identification of historic properties, assessment of effects upon them, and consideration of alternatives to avoid or reduce those effects.

**Sediment**

Organic matter or soil that settles to the bottom of a liquid.

**Seedlings**

As used in timber survey, trees less than one inch at DBH.

**Selection harvest cut**

See “uneven-aged management.”

**Selective grazing**

The grazing of plant species, individual plants, or plant parts in preference to others.

**Sensitive species**

Those plant and animal species identified by a Regional Forester for which population viability is a concern, as evidenced by: significant current or predicted downward trends in population numbers or density; or significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution.

**Sensitivity level**

As used in visual quality management, a particular degree or measure of viewer interest in the scenic qualities of the landscape (1 - Most sensitive; 2 - Sensitive; 3 - Least sensitive).

**Shade-tolerant species**

A tree or other plant species having the capacity to grow without receiving direct sunlight.

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**Shelterwood system**

A method of regenerating an even-aged stand in which a new age class develops beneath the moderated microenvironment provided by the residual trees. The sequence of treatments can include three distinct types of cutting: 1) an optional preparatory cut to enhance conditions for seed production; 2) an establishment cut to prepare the seedbed and to create a new age class; and 3) a removal cut to release established regeneration from competition with the over-story. Cutting may be done uniformly throughout the stand, in groups or patches, or in strips.

**Shrub**

A plant with persistent woody stems and relatively low growth form; usually produces several basal shoots as opposed to a single bole; differs from a tree by its low stature and non-arborescent form.

**Silviculture**

The art and science of controlling the establishment, growth, composition, health, and quality of forests and woodlands to meet the diverse needs and values of landowners and society on a sustainable basis.

**Silvicultural system**

A planned process whereby a stand is tended, harvested and re-established. The system name is based on the number of age classes and/or the regeneration method used.

**Sinkhole**

A natural depression in a land surface communicating with a subterranean passage, generally occurring in limestone regions and formed by solution or by collapse of a cavern roof.

**Site preparation**

A hand or mechanized manipulation of a site designed to enhance the success of regeneration. Treatments may include cutting, burning, chopping, disking, raking and scarifying. All treatments are designed to modify the soil, litter, and vegetation to create microclimate conditions conducive to the establishment and growth of desired species.

**Size class**

Tree size recognized by distinct ranges, usually of height or diameter.

**Slash**

Woody debris left after logging, pruning, thinning, or brush cutting. It includes logs, chunks, bark, branches, stumps, and broken small trees or brush.

**Snag**

A standing dead tree from which most of the leaves have fallen. Snags may be newly dead and appear to be a leafless tree, or not much more than a tall stump from which all the branches and bark have fallen.

**Sod grasses**

Grasses with stolons or rhizomes that form a turf.

**Softwood**

A coniferous tree. Trees belonging to the botanical group *gymnospermae*.

**Soil displacement**

The movement of soil particles from one place to another by erosion or management activities and/or those influences which occur in the soil structure.

**Soil horizons**

A layer of soil, approximately parallel to the surface, having distinct characteristics produced by soil forming processes and differing in characteristics and properties from the adjacent layers above and below it.

**O horizon** – Organic layer of fresh and decaying plant residue

**A horizon** – The mineral horizon at or near the surface in which an accumulation of humified organic matter is mixed with mineral material. This horizon has the most organic matter accumulation, the most biological activity, and/or loss of materials containing iron, aluminum, and clay.

**B horizon** – Horizon, usually below the O, A, or E horizon, and is, in part, a transition layer from the overlying horizon to the underlying C horizon. It is characterized by (1) accumulation of clay material, humus, and other material, (2) prismatic, or blocky structure, and/or (3) redder or browner colors than those in the overlying horizon.

**C horizon** – Mineral horizon, excluding bedrock, that is little affected by soil forming processes and does not have the properties found in the overlying horizon.

**E horizon** – Mineral horizon in which the main feature is loss of clay particles, iron, aluminum, or combination of these.

**R horizon** – Bedrock underlying the C horizon.

**Species**

A fundamental category of plant or animal classification.

**Species composition**

The proportions of various plant species in relation to the total on a given area.

**Stand**

A contiguous group of trees sufficiently uniform in age-class distribution, composition, and structure, and growing on a site of sufficiently uniform quality, to be a distinguishable unit.

**Stand density**

A quantitative, absolute measure of tree occupancy per unit of land area in much the same terms as number of trees, basal area, or volume.

**Standard**

A principle requiring a specific level of attainment; a rule to measure against.

**State Historic Preservation Officer (SHPO)**

A SHPO is designated in each state by the governor to coordinate preservation activities in that State. SHPOs are central to the national historic preservation program. Under Section 106 of the National Historic Preservation Act of 1966, as amended, and its accompanying regulations found in 36 CFR Part 800, SHPOs consult with and provide assistance to Agency officials when identifying historic properties, assessing effects upon them, and considering alternatives to avoid or reduce those effects.

**State Implementation Plans (SIP)**

A document prepared by each state describing existing air quality conditions and measures, which will be taken to attain and maintain National Ambient Air Quality Standards (NAAQS). EPA approved state plans for the

establishment, regulation and enforcement of air pollution standards. These are plans a state must develop pursuant to sec. 110 (d) of Title I of the CAA, to provide for attainment and maintenance of NAAQS.

**Stocking density**

The relationship between number of animals and area of land at any given time.

**Stocking rate**

The number of specific kinds and classes of animals grazing a unit of land for a specified time period.

**Stream**

A channel with defined bed and a bank that carries enough water flow at some time during the year to flush out leaves.

**Structure**

The horizontal and vertical distribution of components of a forest stand including the height, diameter, crown layers and stems of trees, shrubs, herbaceous under-story, snags, and down woody debris.

**Subsoil**

Technically, the B horizon.

**Subsurface layer**

Any surface soil horizon below the surface layer

**Subsurface water**

Waters contained in caves, voids, or interstices of rocks below the surface.

**Succession**

A series of dynamic changes by which organisms succeed one another through a series of plant community (seral) stages leading to potential natural community or climax.

**Suitability**

The adaptability of an area to grazing by livestock or wildlife.

**Suitable timberlands**

Forest lands to be managed for timber production.

**Surface soil**

The A, E, or combinations of those horizons.

**T****Temporary Road**

A road authorized by contract, permit, lease, other written authorization or emergency operation not intended to be a part of the Forest transportation system and not necessary for long-term resource management.

**Terms and Conditions**

Mandatory actions that must be taken by a Federal agency to implement the Reasonable and Prudent Measures of an Incidental Take Statement issued by the U.S. Fish and Wildlife Service.

**Thinning**

A cultural treatment made to reduce stand density of trees primarily to improve growth, enhance forest health, or to recover potential mortality.

**Threatened Plant Species**

Any plant species likely to become endangered within the foreseeable future through all or a significant portion of its range, including species categorized as rare, very rare or depleted.

### **Threatened Species**

Any species which is likely to become endangered within the foreseeable future and which has been designated in the Federal Register as threatened species.

### **Tiering**

Tiering refers to the coverage of general matters in a broader environmental impact statement (such as national program or policy statements) with subsequent narrower statements or environmental analyses (such as regional or basin-wide program statements or ultimately site-specific statements) incorporating by reference the general discussions and concentrating solely on the issues specific to the subsequent statements or analyses is:

- a. From a program, plan or policy environmental impact statement to a program, plan, or policy statement or analysis of lesser scope or to a site-specific statement or analysis.
- b. From an environmental impact statement on a specific action at an early stage (such as need and site selection) to a supplement (which is preferred) or a subsequent statement or analysis at a later stage (such as environmental mitigation). Tiering in such cases is appropriate when it helps the lead agency to focus on the issues which are ripe for decision and exclude from consideration issues already decided on or not yet ripe (40 CFR 1508.28).

### **Timber production**

The purposeful growing, tending, harvesting and regeneration of regulated crops of trees to be cut into logs, bolts, or other round sections for industrial or consumer use. For purposes of this document, the term *timber production* does not include production of fuelwood.

### **Timber stand improvement (TSI)**

Usually related to activities conducted in young stands of timber to improve growth rate and form of the remaining trees. Examples include thinning, pruning, fertilization and control of undesirable vegetation.

## **U**

### **Unclassified Roads**

Roads on National Forest System lands that are not managed as part of the forest transportation system, such as unplanned roads, abandoned travelways, and off-road vehicle tracks that have not been designated and managed as a trail; and those roads that were once under permit or other authorization and were not decommissioned upon the termination of the authorization. The MTNF Land and Resource Management Plan uses the term “non-system roads” to define unclassified roads.

### **Under-story (vegetation)**

Shade-tolerant plants growing below the canopy of other plants. Usually refers to grasses, forbs and low shrubs under a tree or brush canopy.

### **Undertaking**

Any project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency or licensed or assisted by a Federal agency.

### **Uneven-aged methods**

Methods of regenerating a forest stand and maintaining an uneven-aged structure by removing some trees in all size classes either singly, in small groups, or in strips.

### **Upland**

The higher ground of a region, in contrast with a valley, plain, or other low-lying land.

## **Use**

The proportion of current years forage production that is consumed or destroyed by grazing animals.

## **V**

### **Variety class**

A particular level of visual variety or diversity of landscape character. The three categories are:

**Distinctive (Class A)** – Refers to unusual and/or outstanding landscape varieties that stand out from the common features in the character type.

**Common (Class B)** – Refers to prevalent, usual or widespread landscape variety within a character type. It also refers to ordinary or undistinguished visual variety.

**Minimal (Class C)** – Refers to little or no visual variety in the landscape. Monotonous or below average compared to the common features in the character type.

### **Vegetative manipulation**

The change from one vegetation type to another. It can be done using a tractor, chemicals or fire. Usually done to increase forage for livestock; it can be a beneficial tool for wildlife management.

### **Vertical diversity**

The diversity in an area that results from the complexity of the above-ground structure of the vegetation; the more tiers of vegetation and/or the more diverse the species composition, the higher the degree of vertical diversity.

### **Visual absorption capacity (VAC)**

Indicates the relative difficulty or cost of achieving VQO's; measures the land's capacity to absorb the visual impact of management activities.

### **Visual distance zones**

Areas of landscapes denoted by specific distances from the observer; used as a frame of reference in which to discuss landscape characteristics or human activities.

**Foreground** – That part of a scene, landscape, etc. which is nearest to the viewer and in which detail is evident, usually up to one-quarter mile from the viewer.

**Middle ground** – That part of a scene or landscape that extends from the foreground zone to ½ to 2 miles from the observer. Texture is discernible at that distance.

**Background** – The distance part of a landscape; surroundings, especially those behind something, providing harmony and contrast; area located from two miles to infinity from the viewer.

### **Visual resource**

The composite of basic terrain, geologic features, water features, vegetative patterns and land-use effect that typify a land unit and influence the visual appeal the unit may have for visitors.

### **Visual quality objective (VQO)**

A desired level of excellence based on physical and sociological characteristics of an area. Refers to the quality of a landscape, the degree of acceptable alteration on the characteristic landscape.

**Maximum Modification (MM)** – Human activity may dominate the characteristic landscape but should appear as a natural occurrence when viewed as background area.



**Partial Retention (PR)** – Human activity may be evident but must remain subordinate to the characteristic landscape.

**Modification (M)** – Human activity may dominate the characteristic landscape but must, at the same time, utilize naturally established form, line, color and texture. It should appear as a natural occurrence when viewed in foreground or middle ground.

**Retention (R)** – Human activities are not evident to the casual forest visitor

**Preservation (P)** – Provides for ecological change only

## **W**

### **Warm-season plant**

A plant that makes most or all its growth during late spring, summer or early fall and is usually dormant in winter.

### **Water table**

The upper limit of the part of the soil or underlying rock material that is wholly saturated with water.

### **Watershed**

An area of land with a single drainage network.

### **Weed**

(1) A plant growing where unwanted. (2) A plant having a negative value within a given management system.

### **Wetlands**

Those areas that are inundated by surface or ground water often enough to support plants and other aquatic life that requires saturated or seasonally saturated soils for growth and reproduction. Wetlands generally include swamps, marshes, bogs and similar areas such as sloughs, potholes, wet meadows, fens, river overflows, mud flats, and natural ponds.

### **Wildlife habitat**

The sum total of environmental conditions of a specific place occupied by a wildlife species or a population of such species.

### **Wildlife structure**

A site-specific improvement of a wildlife or fish habitat, for example, constructed waterholes, placement of logs, old Christmas trees, etc. in a lake or pond to provide cover for fish, nest boxes for ducks, raptors, birds, bats, etc.

### **Woodland**

A forest community characterized by over-story trees widely spaced enough to allow light to the under-story, with a ground cover of forbs and grasses.